

**MEETING DATE:** April 28, 2016

**TITLE:** Authorization to Execute Contracts for Design and Construction Oversight for the Highway 101 Causeway Shoreline Reconstruction Project

**RESOLUTION NUMBER:** 16-043

**PREPARED BY:** Tiffany Schaufler

**E-MAIL:** tschaufler@minnehahacreek.org

**TELEPHONE:** 952-641-4513

**REVIEWED BY:**  Administrator       Counsel       Program Director:  
 Board Committee       Engineer       Other

**WORKSHOP ACTION:**

<input type="checkbox"/> Advance to Board mtg. Consent Agenda.	<input type="checkbox"/> Advance to Board meeting for discussion prior to action.
<input type="checkbox"/> Refer to a future workshop (date):_____	<input type="checkbox"/> Refer to taskforce or committee (date):_____
<input type="checkbox"/> Return to staff for additional work.	<input type="checkbox"/> No further action requested.
<input checked="" type="checkbox"/> Other (specify): Not reviewed at Workshop. Seeking final action at April 28, 2016 Board Meeting.	

**PURPOSE or ACTION REQUESTED:**

Authorization to execute contracts with Wenck Associates, Inc. and Hart Howerton for design and construction services for the Highway 101 Causeway Shoreline Reconstruction Project.

**PROJECT/PROGRAM LOCATION:**

Wayzata/Grays Bay Causeway in the City of Wayzata

**PROJECT TIMELINE:**

- April 2016: Award design services
- June 2016: Review of preliminary design
- July 2016: Review final design, construction bid award
- Fall 2016-Spring 2017: Construction

**PROJECT/PROGRAM COST:**

Fund name and number: Highway 101 Causeway Reconstruction, 3149  
Current budget: \$1,604,308  
Expenditures to date: \$0  
Requested amount of funding: \$155,358.50 (\$141,235 + 10% contingency)

## **PAST BOARD ACTIONS:**

- October 24, 2013 – Resolution to express support for working with Hennepin County on a plan for vegetated reinforced soil slopes in the Grays Bay causeway, and direct the staff to prepare a plan in consultation with the County, along with a project budget and cost share resolution.
- December 12, 2013 – Resolution to direct staff to:
  1. Communicate its commitment to reviewing the Bushaway Road Project for compliance with all MCWD rules, recommending enhancements to the Project as submitted by Hennepin County beyond current regulatory requirements for which the MCWD would take financial responsibility;
  2. These enhancements would include the design, construction and maintenance of the Wayzata Bay Restoration Shoreline Project, to be installed after the County has completed seawall construction and with a County funding contribution equal to the cost of the riprap design presented on October 24, 2013;
  3. The MCWD enhancements also would include improvements to stormwater management facilities, and the MCWD will be responsible for enhancements to the Project beyond those presented by the County on October 24, 2013 that exceed MCWD requirements for the entire project within the City of Wayzata.
- January 23, 2014
  - Approval of MCWD Permit 13-460
  - Resolution 14-008: Authorization to executed a Cooperative Agreement with Hennepin County for CSAH 101
- October 23, 2014 – Resolution 14-088: Authorization to execute a Cooperative Agreement with the City of Minnetrista to effect a transfer of the fee title interest in 3.26 acres of land to MCWD, for purposes of floodplain mitigation to fulfill the District's regulatory obligation under permit 13-460 Bushaway Road.
- February 26, 2015 – Public Hearing for Highway 101 Causeway Reconstruction Project
- March 26, 2015 – Ordering of Highway 101 Causeway Reconstruction Project

## **SUMMARY:**

Following review of Hennepin County's proposed improvement to CSAH 101, at the October 24, 2013 Board Meeting, the Board of Managers resolved to express support for working with Hennepin County to develop a vegetated solution to the Grays/Wayzata Bay Causeway shoreline, including a project budget and plan to finance.

The Board of Managers reinforced its support for developing a partnership with Hennepin County at the December 12, 2013 Board Meeting. At this meeting the Board resolved to communicate its commitment to identify enhancements to the project beyond current regulatory requirements. Pursuant to Board resolution, District staff worked closely with the District engineer and legal counsel to engage with Hennepin County in exploration of feasible enhancements to the Grays/Wayzata Bay shoreline.

The District and the County developed a cooperative agreement that allows the District to install and maintain vegetated reinforced soil slopes and related bioengineering and vegetation features along the Grays/Wayzata Bay Causeway, with a \$30,000 reimbursement from Hennepin County. The District's bioengineering element brought the County's design into conformance with the requirements of the District's shoreline rule and allowed the District to approve the work without the need to consider a variance. For that reason, staff's recommended

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**DRAFT for discussion purposes only and subject to Board approval and the availability of funds.  
Resolutions are not final until approved by the Board and signed by the Board Secretary.**

conditions on the permit included a condition requiring that the County enter into an agreement with the District affording the District the ability to do the bioengineering work.

In January 2014, Hennepin County as a co-applicant with MCWD applied, and was issued, a permit for the linear reconstruction of CSAH 101 between Minnetonka Boulevard and Wayzata Boulevard.

Through the cooperative agreement between Hennepin County and MCWD, the County provided for the District to implement a shoreline restoration project within the corridor, following road construction. This planned work to stabilize Lake Minnetonka shoreline with vegetated reinforced soil slopes (VRSS), similar to those used on Big Island, will fill some of the 100 year floodplain. Consequently, as a condition of District permit 13-460, MCWD obligated itself to provide “compensatory storage for floodplain fill along the causeway due to vegetative slope construction.” Design of the necessary floodplain mitigation will occur under a separate design contract and staff intends to bring it before the Board for authorization in May 2016.

In March 2015, the Board ordered the Highway 101 Causeway Reconstruction Project. Staff has developed a scope of services to obtain professional engineering and landscape design services for the project. Staff sought an engineering design and construction oversight proposal from Wenck Associates to design and oversee installation of the VRSS shoreline along the Wayzata Bay shoreline. Staff also sought a landscape design proposal from Hart Howerton for landscape design along Wayzata Bay and Gray’s Bay shorelines. Both design and construction oversight proposals can be viewed in Attachment 2 and 3. Staff recommends executing a contract with Wenck Associates for engineering design and construction oversight services for an amount not to exceed \$98,169.50 and executing a contract with Hart Howerton for landscape design and construction oversight services for an amount not to exceed \$57,189.

Board policy stipulates that the administrator is to secure competitive quotes for professional services work over \$25,000. Staff has not obtained competitive quotes in this case, under the rationale that Wenck Associates and Hart Howerton are uniquely qualified for this project based on their history of work for the District on this project and other projects. Specific to this project, Wenck Associates and Hart Howerton developed concept designs and cost estimates for the project to assist with public meetings and ordering of the project. Wenck also has an established and trusted relationship with Hennepin County staff involved in the project and has a unique understanding of wave energy specific to the Wayzata Bay shoreline.

**ATTACHMENTS:**

- Attachment 1: MCWD Scope of Work Report: Design of Highway 101 Causeway Shoreline Restoration Project
- Attachment 2: Wenck Associates proposal and budget for engineering design and construction oversight services
- Attachment 3: Hart Howerton proposal and budget for landscape design and construction oversight services

## RESOLUTION

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**RESOLUTION NUMBER: 16-043**

**TITLE: Authorization to Execute Contracts for Design and Construction Oversight for the Highway 101 Causeway Shoreline Reconstruction Project**

WHEREAS, the Minnehaha Creek Watershed District (MCWD) has adopted a watershed management plan (WMP) in accordance with Minnesota Statutes §103B.231; and

WHEREAS, the WMP identifies the Highway 101 Causeway Reconstruction Project (“Project”) as a capital improvement project for the purpose of water quality and ecological benefits through the promotion of bioengineering techniques within the Lake Minnetonka subwatershed, which includes both the causeway shoreline restoration work (“causeway element”) and the independent but associated flood storage replacement work (“flood storage element”); and

WHEREAS, in January 2014 the District issued Permit 13-460 to Hennepin County (“County”) and the District, as co-applicants, for the linear reconstruction of CSAH 101 between Minnetonka Boulevard and Wayzata Boulevard; and

WHEREAS, the District is a co-applicant because of its intent, through a cooperative agreement with the County, to construct a shoreline restoration project along CSAH 101 using vegetated reinforced soil slopes for stabilization and naturalization; and

WHEREAS, on February 17, 2015, the City of Wayzata adopted a resolution of support for the design and construction of the Highway 101 Causeway Reconstruction Project; and

WHEREAS, on March 26, 2015, the MCWD Board of Managers ordered the Highway 101 Causeway Reconstruction Project; and

WHEREAS, staff has developed a scope of services to obtain professional engineering and landscape design services for the causeway element of the Project; and

WHEREAS, Wenck Associates and Hart Howerton are uniquely qualified for this work based on their history of work for the District on this Project and other projects, including developing concept plans and cost estimates to assist with ordering of the Project; and

WHEREAS, internal Governance Policy #6 provides for a competitive process when purchasing any professional service in excess of \$25,000, but staff recommends, and the Board finds, that it is appropriate to deviate from that policy in light of Wenck Associates and Hart Howerton’s unique knowledge of the Minnehaha Creek watershed and the organizational goals of the District, as well as their work to date in developing concept design plans for the Project, which together makes Wenck Associates and Hart Howerton uniquely qualified to develop a sound product cost-effectively.

NOW, THEREFORE, BE IT RESOLVED, that the Minnehaha Creek Watershed District Board of Managers hereby authorizes the District Administrator to execute a contract with Wenck Associates for engineering design and construction oversight services for the causeway element of the Highway 101 Causeway Reconstruction Project for an amount of \$89,245 and authorize the District Administrator to execute change orders as necessary up to a not-to-exceed amount of \$98,169.50; and

BE IT FURTHER RESOLVED that the District Administrator is authorized to execute a contract with Hart Howerton for landscape design and construction oversight services for the causeway element of the Highway 101 Causeway Reconstruction Project for an amount of \$51,990 and authorize the District Administrator to execute change orders as necessary up to a not-to-exceed amount of \$57,189.

Resolution Number 16-043 was moved by Manager \_\_\_\_\_, seconded by Manager \_\_\_\_\_.  
Motion to adopt the resolution \_\_\_ ayes, \_\_\_ nays, \_\_\_ abstentions. Date: \_\_\_\_\_.

\_\_\_\_\_  
Secretary Date: \_\_\_\_\_



## Scope of Work Report

### Design of Highway 101 Causeway Shoreline Reconstruction Project

1. **PURPOSE:** To identify the plan, scope, technical requirements, schedule and budget for design and construction observation of the Highway 101 Causeway Shoreline Reconstruction Project. The design proposal should include all the variables that need to be considered when designing all parts of the project and how these systems work together.
2. **RESOURCES:**
  - a. MCWD Hydraulic, Hydrologic, Pollutant Loading Study, 2003
  - b. Feasibility Study Soil Bioengineering Technology for the Causeway and Headwaters Area in Gray's Bay on Lake Minnetonka in Minnesota, 2001
  - c. Wenck Associates Memo: Bushaway Road Shoreline Stabilization and Floodplain Mitigation Options – December 14, 2014
  - d. Hart Howerton Concept Plans – March 25, 2015
3. **BACKGROUND:**

#### Project

In 2001, a soil bioengineering feasibility study was completed for the Highway 101 Causeway and the Headwaters area of Gray's Bay. The "Causeway" which is known as Hennepin County Highway 101, separates Wayzata Bay from Gray's Bay on Lake Minnetonka. In 2015, Hennepin County widened the Causeway in an effort to improve traffic flow and to include a pedestrian walkway along the Gray's Bay side.

The Minnehaha Creek Watershed District (MCWD) expressed support to work cooperatively with Hennepin County to develop a vegetated solution to the Wayzata Bay and Gray's Bay Causeway shoreline. This resulted in MCWD and Hennepin County entering into a cooperative agreement which allows MCWD to install and maintain vegetated reinforced soil slopes (VRSS) and related bioengineering and vegetation features along the Causeway, following road construction by Hennepin County. MCWD has committed to installing VRSS on the Wayzata Bay side of the

Causeway and has agreed to look at options to enhance the existing vegetation along the Gray's Bay side of the Causeway.

Hennepin County is the property owner of Highway 101, and a cooperative agreement and easement have been executed with MCWD to secure the necessary rights to complete the Causeway restoration project.

### Goals

The goals of this project, as outlined in the MCWD Comprehensive Water Resources Management Plan, are to:

- Promote bioengineering techniques for application to other highway and roadway projects
- Water quality and ecological benefits by using vegetated slopes rather than hard armoring

### Design Concepts

An initial feasibility study in 2001, looked at soil bioengineering technology for the Causeway. This 2001 study suggested using VRSS along the Causeway and provided conceptual cross-section examples. In 2014 and 2015, Wenck Associates and Hart Howerton applied this information and created up to date concept plans for different sections of the Causeway.

### Budget

MCWD has budgeted a total of \$1,364,308 to cover the costs of design, construction and the first three years of maintenance for the project.

### Timeline

The project is scheduled to be designed in the spring-summer of 2016. Depending on permit approvals, construction may begin in the fall of 2016 or the spring of 2017. The majority of the planting is expected to occur in the spring of 2017.

#### 4. PROJECT DELIVERABLES (CONTRACT SERVICES):

MCWD will contract the services of a CONSULTANT to complete a number of task items (detailed below):

##### **a. Data Collection:**

- CONSULTANT will collect and review project resources listed in section 2.
- CONSULTANT will collect additional survey data and site condition information (soils, aspect/light, depth to water, slope) as needed to develop site plans and biddable construction documents.

##### **b. Preliminary Engineering and Design Draft Report:**

- CONSULTANT will prepare 60% Preliminary Engineering and Design Draft Report suitable for review by District staff and Board and regulatory agencies.
- Plan sheets shall include:

- Title Sheet with Location Map
- Topographic Survey
- Statement of Estimated Quantities
- Removal Plan
- Construction Notes
- Stormwater Pollution Prevention Plan
- Grading and Drainage Plan
- Erosion Control Plan & Details
- Site Details
- Planting Plan
- Landscape Details
- Provide preliminary opinion of probable costs.
- Provide quantification of benefits from the project
- Prepare an operations and maintenance plan which provides for short and long-term maintenance of vegetation and other necessary project components included in the construction contract.
- Assumptions:
  - Designs must meet the technical standards and requirements of all relevant review agencies.
  - CONSULTANT will submit Preliminary Engineering and Design Draft Report to MCWD for review and approval. CONSULTANT will meet with MCWD staff to discuss Draft Report and preliminary site plans.

**c. Final Engineering and Design Report:**

- CONSULTANT will utilize input on the draft report to complete a Final Engineering and Design Report for District staff review. In addition to the elements described in the draft report, the final report will contain the following:
  - Project plans and specifications suitable for construction and regulatory review, including:
    - Title Sheet with Location Map
    - Topographic Survey
    - Statement of Estimated Quantities
    - Removal Plan
    - Construction Notes
    - Stormwater Pollution Prevention Plan
    - Grading and Drainage Plan
    - Erosion Control Plan & Details
    - Site Details
    - Planting Plan
    - Landscape Details
  - A detailed opinion of probable costs that itemizes the projected costs of implementation, including mobilization, grading, planting, erosion



control materials. Cost-estimates must also include estimated long-term management costs projected annually.

- An operations and maintenance plan which provides for short-term maintenance of vegetation and other necessary project components included in the construction contract as well as long-term management of the project.

**d. Permitting:**

- CONSULTANT will prepare permit applications and all required submittals to all applicable agencies at the 60% design stage. Permits are anticipated to be needed from the following agencies: MN Department of Natural Resources, US Army Corps of Engineers, City of Wayzata, City of Minnetonka, and MCWD.
- CONSULTANT will develop a monitoring plan if required by the US Army Corps of Engineers.

**e. Design Meetings:**

CONSULTANT will plan for the following meetings/coordination and provide meeting minutes:

- Kickoff meeting with MCWD staff
- Coordination meetings with the City of Wayzata's Bushaway Landscape Committee, City of Minnetonka's Natural Resource staff, and Hennepin County on the planting plan and landscape details
- Coordination with other regulatory agencies as needed to obtain permits
- Meeting with MCWD staff to review 60% Preliminary Design Report and site plans
- Prepare for and attend District Board meeting to summarize the results from the Final Engineering and Design Report
- Stakeholder/neighborhood meetings
- Regular check-in calls/updates with MCWD project manager

**f. Construction Bid Documents and Bidding:**

CONSULTANT will:

- Prepare 100% final, signed plans (including sheets as noted in Task 4c), technical specifications, including plant guarantees and quality control
- Prepare engineer's cost estimate
- Consultant will prepare hard-copy bid specification packages and provide MCWD a PDF version of the bid specification package
- Prepare NPDES permit application in signature-ready format.
- Bid Coordination:
  - Prepare advertisement for bid.
  - Prepare for and attend pre-bid meeting.
  - Respond to bidder questions and prepare addenda, if necessary.
  - Bid opening.
  - Tabulate bids and prepare recommendation for contract award.
- Assumptions:

- District staff will provide the contract portion of the specifications. The consultant will update the contract portion with project specific information including bid advertisement. The consultant will prepare the technical specifications including the bid forms.

**g. Construction Observation & Administration**

CONSULTANT will provide on-site supervision of contractor for site specific placement of prescribed practices. Anticipated activities include:

- Prepare for and attend pre-construction meetings with MCWD and Contractor
- Perform construction staking
- Observe construction operations at key points of project. Attend construction meetings as needed over the construction period.
- Perform post-construction survey and provide as-built record drawings and electronic GIS files.
- Contract management: Prepare quantities, pay requests and change orders
- Attend final inspection and prepare punch list

**5. SUBMITTAL FORMAT:**

All work submitted under this Scope of Work shall be submitted in the following formats:

- a. Written sections of the draft report shall be prepared using Microsoft Word processing software. Hard-copy submittals shall be on 8.5- by 11.0-inch white paper with accompanying electronic copies on compact disk. The report shall use the "Times New Roman" 12 font. The left-hand margin shall be 1 inch to allow for binding of the report.
- b. Plan sets may be submitted as 11 x 17 PDFs or other formats, as approved by District Staff.
- c. All drafts and final reports will be free of any corporate logos or commercial identification. MCWD will allow for identification of the plan author at the beginning of the report and credited references where necessary and appropriate.
- d. The CONSULTANT will submit two hard copies and one electronic copies of the draft report for review.
- e. The CONSULTANT will submit two hard copies and one electronic copies of the Final report.
- f. The CONSULTANT will submit any electronic ArcGIS or AutoCAD files created (including metadata): i.e. shape files, metadata in reference to shape files, line and point files, layer files (which correspond to hard copy version, etc.)

**6. SCHEDULE & BUDGET:**

- a. Consultant will identify a Schedule and Budget for each task item and subtask identified in Section 4 using the spreadsheet provided as Exhibit B.
- b. The tentative schedule for construction calls for bioengineering work in late 2016 or spring 2017, with most of the planting occurring in spring 2017.



Responsive partner.  
Exceptional outcomes.

4/21/2016

**Tiffany Schaufler**

Project and Land Program Manager  
Minnehaha Creek Watershed District  
15320 Minnetonka Blvd.  
Minnetonka, Minnesota 55345

RE: Request for Proposal - Design of Highway 101 Causeway Shoreline Reconstruction Project

**Dear Tiffany:**

The Wenck Water Resources Group is happy to respond to your request for a proposal to provide design, bidding and construction phase services to Minnehaha Creek Watershed District for the Highway 101 shoreline reconstruction generally located on the Causeway between Grays Bay and Wayzata Bay. We have reviewed your scope of work report and fashioned our response to fit the format of your report, thereby being as responsive as possible and eliminating the need to restate the scope of work here.

Assumptions and Approach

Our approach is as anticipated in your Scope of Work Report. However, we have had to make some assumptions when estimating costs. The biggest unknown impact to estimating construction related costs is the responsiveness of the contractor you select, the period of construction and any severe deviation from normal weather. As such we have assumed one construction period of 2 months in the fall of 2016. If the period of construction is longer, it could significantly affect construction observation costs. We also assumed our design and construction observation will be limited to activity on the Wayzata Bay side of the causeway.

MCWD staff intends to write the upfront specifications which include bonds and statements of work, bid forms, general conditions, etc. We also understand that our responsibility will be limited to producing industry standard technical specifications, typically structured as Section 2 in previous bid packages. However, there is a host of documents that are included in Sections 0 and 1 that are not technical specifications or up-front contract documents. Examples include Instructions to bidders, the bid form, measurement and payment instructions, special provisions that are meant to supersede general conditions, etc. Our estimated costs assume we are only providing technical specifications, as you requested, and none of the other documents in the bidding package. Our assumption is we will submit certified technical specifications (Section 2) to you for your incorporation into a bidding package.

We recommend and have included costs to perform an off-shore geotechnical investigation to enable the design of the rock placement adjacent to the sheet pile wall and the design of off-shore wave breaks. We have assumed a cost of \$5,000 to complete this study. However, we will make every attempt to utilize information the county may have like boring logs, records of

**Tiffany Schaufler**  
Project and Land Program  
Manager  
Minnehaha Creek Watershed  
District  
4/21/2016



blow counts while driving piling, etc. We also intend to survey pre-project cross sections at a 25-foot interval. These will be used for design, payment of quantities and a baseline comparison to the as-built condition when the project is completed. The planting plan will also be surveyed in the as-built condition.

We do not expect regulatory issues to arise with the off-shore wave break design as we have already had some discussion with MDNR about the mitigation. As it stands right now, we are not aware of any regulatory agency issues.

We noticed that LMCD was not specifically mentioned as a stakeholder but we would expect them to have an interest in the design MCWD pursues, especially since the offshore wave break may represent a navigation consideration boaters will not be used to. We have not included any costs to coordinate with LMCD and assumed MCWD staff will perform any necessary coordination.

Lastly, we understand MCWD will independently employ a landscape architect to produce a planting plan, planting lists and maintenance requirements. Therefore we have only included costs to incorporate the landscape architect deliverables into the technical specifications and drawings for the Wayzata Bay side of the causeway.

#### Wenck Expertise

Wenck personnel are positioned to provide the highest value to MCWD that is available anywhere. The reasons for this include:

- Wenck people have decades of experience with MCWD.
- We have an established and trusting relationship with Hennepin County staff involved in the project. This will expedite process and thus minimize costs.
- MDNR hydrologists and permitting staff have trust in Wenck people, not only from an MCWD context but from project work all over the Metro Area for other watershed districts and municipalities. MDNR staff has already responded favorably to concepts developed by Wenck.
- Wenck has unique understanding of wave energy specific to the Wayzata Bay shoreline through modeling using USACE methods.
- The Board of Managers has approved concept designs developed by Wenck people.
- The interface of the steel sheet pile with soil and rock on a high energy shoreline presents a complex hydraulic pumping situation that will require special treatment to maintain stability. The offshore wave break will help alleviate excess energy but special designs will be needed to protect the soil and vegetation. This in many ways makes the previous feasibility study obsolete because the sheet pile did not exist when the feasibility study was done.
- Chris Meehan will be the Project Manager, providing MCWD with continuity and clear communications during the course of the project.

**Tiffany Schaufler**  
Project and Land Program  
Manager  
Minnehaha Creek Watershed  
District  
4/21/2016



On behalf of the Wenck Water Resources Group, thank you for this opportunity to work with Minnehaha Creek Watershed District. Should you have any questions, or need clarification of anything presented in the attached proposal, please do not hesitate to call me.

Sincerely,

**Wenck Associates, Inc.**

Chris Meehan, PE (Minnesota)  
Project Manager  
763-252-6844  
612-210-2111 (cell)  
[cmeehan@wenck.com](mailto:cmeehan@wenck.com)

**Attachment:** Exhibit B- Scope of Work Budget Worksheet – Highway 101 Causeway Shoreline Reconstruction

Attachment 2

Wenck Associates

<b>Exhibit B - Scope of Work Budget Worksheet - Highway 101 Causeway Shoreline Reconstruction</b>				
ID	Task	Estimated Hours	Budget	Schedule
a	Data Collection <sup>1</sup>	33	10,040.00	5/2-13/2016
b	Preliminary Design Report <sup>2</sup>	122	17,510.00	5/2-31/2016
c	Final Design Report <sup>3</sup>	82	12,200.00	6/20/2016-7/8/2016
d	Permitting <sup>4</sup>	11	1,590.00	6/20/2016-8/1/2016
e	Design Meetings <sup>5</sup>	33	6,065.00	5/2-2016-7/21/2016
f	Construction Bid Documents and Bidding <sup>6</sup>	59	9,470.00	7/11-25/2016
g	Construction Observation and Oversight <sup>7</sup>	244	32,370.00	8/1/2016-10/31/2016

Sub-Total	584	89,245.00
Contingency (10%)		\$ 8,924.50
<b>Total</b>		<b>\$ 98,169.50</b>

Consultant	Time Allocation	Hourly Rate
Wenck	100%	\$130/\$180 per hr
Geotechnical Subconsultant	0%	\$5,000

Assumptions (also see cover letter)

<sup>1</sup> Includes pre-project survey and limited offshore geotechnical investigation

<sup>2</sup> Includes 60% plans, estimated quantities, SSSWP, planting plan and quantities, an opinion of construction & maintenance costs, and O&M plan

<sup>3</sup> Includes 100% plans, final opinion of construction & maintenance costs, 100% design report and Final O&M plan

<sup>4</sup>USACE submittal only. MCWD staff responsible for other permitting submittals

<sup>5</sup>Up to five meetings not included in Task f or Task g. Additional meetings at approximately \$750 each

<sup>6</sup>Ten sets of Technical Specifications (Section 2) only and ten sets of plans. Additional sets of hardcopy plans and technical specifications are \$200 each.

Also includes Advertisement for bids, pre-bid meeting, bidder question responses, addenda, attend bid opening, bid tabulation and contract award recommendation

<sup>7</sup>Includes pre-construction meeting, providing reference coordinates, 8 progress meetings, on-site 15 hrs per week for 7 weeks, as-built survey and drawings, pay requests, punch list and final inspection with certification memo

April 21, 2016

Tiffany Schaufler  
 Project and Land Manager  
 Minnehaha Creek Watershed District  
 15320 Minnetonka Blvd.  
 Minnetonka, MN 55345

**RE: MCWD Hwy 101 Causeway Shoreline Reconstruction - Wayzata, MN  
 Proposal for Landscape Design, Construction Document and Construction  
 Administration Services:**

Dear Tiffany:

As a follow-up to our work in 2015 related to the Hwy 101 Causeway Shoreline Reconstruction site, located between Grays Bay and Wayzata Bay on Lake Minnetonka, in Wayzata, MN, you and the MCWD have asked us to think through a strategy for taking the master plan layout that we produced in an earlier phase and updating the plan to reflect the new surveyed conditions and generate a Landscape Design. This would be followed by Construction Documents. The Landscape Design and Construction Documents will be prepared as two separate, stand-alone packages; **(1) The Grays Bay Shoreline and (2) The Wayzata Bay Shoreline.** The Grays Bay services are proposed with the understanding that this shoreline will be constructed using a standard MCWD limited quote process. The Wayzata Bay services are proposed with the understanding that this shoreline will be constructed using a public bidding process. This proposal also includes our Construction Administration services for landscape construction scope, assuming that construction will occur in 2016 and that the Grays Bay shoreline will be constructed first. Wenck Associates will provide Civil Engineering design in conjunction with our work including the boulder wall features, erosion control and structural features for both shorelines. For the Wayzata Bay shoreline, Wenck will also be responsible for the overall assembly of the Construction Document package, bidding and construction management. For all work, we see you and the MCWD staff as an integral partner especially related to emergent and live stake planting as well as coordination with all of the agencies. To respond to your request we have developed an approach, scope of work and associated fee below.

#### **Approach and Scope of Work**

For clarity, we have divided the Scope of Work into five main tasks for each of the two shorelines respectively; **Task 1- Preliminary Landscape Design, Task 2 – Construction Documents, Task 3 – Design Meetings, Task 4 – Construction Bid Documents and Bidding and Task 5 – Construction Administration.** The project includes the geographical areas identified as the Central Causeway, Small Island and North end zones from the project documents dated March 25, 2015. It is assumed that all significant work products will be transmitted in electronic form, that construction drawings will be produced using AutoCAD LT software and that an accurate survey of the site will be provided to us by the MCWD.

#### **GRAYS BAY SHORELINE**

**PROPOSED FEE: \$ 18,960**

##### **Task 1 – Landscape Design Tasks**

Landscape Design will build on the design approach that is represented in the Master Plan and as discussed with you recently. The Landscape Design tasks will include the following steps:



- Research potential irrigation supply and power source
- Site visit to augment survey
- Cad formatting and initial file set-up
- Refine and confirm planting design
- Prepare preliminary (60%) planting plans (assume 3 total at 22x34)
- Prepare preliminary (60%) plant list and planting details (assume 1-2 total at 22x34)
- Prepare preliminary (60%) planting specification
- Provide planting/irrigation cost opinion for inclusion in preliminary report

#### **Task 2 – Construction Document Tasks**

Our approach to the Construction Documents will be to work closely with MCWD staff on a regular basis during the CD phase so that landscape and contract documents are fully integrated. We will prepare the drawings, related technical specifications and bid item list for the planting and irrigation improvements. MCWD staff will assemble and print the entire document set that is required to quote the project on a limited basis. Our Construction Document Task will include the following steps:

- Confirm planting design modifications as per review comments
- Prepare final (100%) planting plans (assume 3 total at 22x34)
- Prepare final (100%) plant list and planting details (assume 1-2 total at 22x34)
- Prepare final (100%) planting specification
- Prepare irrigation concept plan with notes for design-build construction
- Provide planting/irrigation cost opinion for inclusion in final report
- Prepare quote item list
- Quality control review

#### **Task 3 – Design Meetings**

We will allow for our attendance at Design Team meetings during the design and documentation phases, and other meetings as noted, held at the MCWD main office.

- Attend up to 2 progress meetings with MCWD staff
- Attend 1 coordination meeting between cities of Wayzata and Minnetonka

#### **Task 4 – Construction Documents and Quote Tasks**

We will run the final plot, and allow for our attendance at the pre quote meeting and answer questions as follows:

- Plot final quote documents
- Attend 1 meeting with prospective companies interested in providing a quote

#### **Task 5 – Construction Administration Tasks**

We have outlined a set of services to be provided during the Construction Administration phase. The general intent is that Hart Howerton will be in an advisory role on portions of the construction that are based on our plans and specifications. The number of meetings attended and site visits assume that meetings and site visits will occur on the same days and that multiple site visit tasks can typically be accomplished during a given site visit. Additional meetings and site visits and the preparation of construction change orders can be provided for an additional fee. It is assumed that the construction schedule will not exceed 4 weeks of active construction. Our Construction Administration tasks will include the following:

- Process irrigation submittals
- Process contractor requests for information (RFI's)
- Attend pre-construction kick-off meeting



- Attend 2 construction observation visits

## **WAYZATA BAY SHORELINE**

**PROPOSED FEE: \$ 33,030**

### **Task 1 – Preliminary Landscape Design Tasks**

Preliminary Landscape Design will build on the design approach that is represented in the Master Plan and will allow us to advance the Master Plan in greater detail. The Preliminary Landscape Design tasks will include the following steps:

- Topo/soil survey review and request additional, if necessary
- Site visit to augment survey
- Prepare aesthetic design concept for boulder wall system
- Prepare typical cross sections in cad of boulder walls
- Prepare site layout in cad of boulder walls
- Refine and confirm planting design
- Prepare preliminary (60%) planting plans (assume 3 total at 22x34)
- Prepare preliminary (60%) plant list and planting details (assume 1-2 total at 22x34)
- Prepare preliminary (60%) planting specification
- Provide planting portions of the following to Wenck for inclusion in preliminary report: cost opinion, advise on operations and maintenance
- Project management and communications

### **Task 2 – Construction Document Tasks**

Our approach to the Construction Documents will be to work closely with Wenck by organizing the document production plan in advance to avoid any duplication of effort and by coordinating with Wenck on a regular basis during the CD phase so that civil and landscape designs are fully integrated. We will prepare the drawings, related technical specifications and bid item list for the planting improvements. Wenck will provide boulder wall, storm water, erosion control and structural drawings, related specifications and bid item list. Wenck will also assemble the entire document set and produce all other specifications and other documents that are required to publically bid the project. Our Construction Document Task will include the following steps:

- Confirm planting design modifications as per review comments
- Coordinate any grading or boulder wall modifications w/Wenck
- Prepare final (100%) planting plans (assume 3 total at 22x34)
- Prepare final (100%) plant list and planting details (assume 1-2 total at 22x34)
- Prepare final (100%) planting specification
- Provide planting portions of the following to Wenck for inclusion in final report: cost opinion, advise on operations and maintenance
- Bid item list/SEQ
- Quality control review

### **Task 3 – Design Meetings**

We will allow for our attendance at Design Team meetings during the design and documentation phases, and other meetings as noted, held at the MCWD main office.

- Prepare exhibits for 1 public presentation
- Attend up to 2 progress meetings with MCWD staff
- Attend 1 meeting/presentation to MCWD board
- Attend 1 coordination meeting between cities of Wayzata and Minnetonka

**Task 4 – Construction Bid Documents and Bidding Tasks**

We will final plot, sign the bid documents, allow for our attendance at the pre bid meeting and answer bidder questions as follows:

- Plot and sign final bid documents
- Attend pre-bid meeting
- Answer bidder questions

**Task 5 – Construction Administration Tasks**

We have outlined a set of services be provided during the Construction Administration phase. The general intent is that Hart Howerton will be in an advisory role on portions of the construction that are based on our plans and specifications. The number of meetings attended and site visits assume that meetings and site visits will occur on the same days and that multiple site visit tasks can typically be accomplished during a given site visit. Additional meetings and site visits can be provided for an additional fee. It is assumed that the construction schedule will extend for approximately 10 weeks of active construction, during 2016. Our Construction Administration tasks will include the following:

- Process product submittals
- Process contractor requests for information (RFI's)
- Advise Wenck on contractor applications for payment
- Attend pre-construction kick-off meeting
- Attend up to 2 construction observation visits
- Process Change Orders
- Attend substantial completion punch list visit and produce punch list

**SCHEDULE**

The MCWD will be setting a construction schedule beginning on or about June 1, 2016 and extending through Substantial Completion on or before October 31, 2016. It is our intention to comply with that schedule and notify you of any issues should they affect the schedule. The schedule is dependent on the receipt of the site survey in a timely way. Should the survey require extra time, the schedule will have to shift to respond to a fair time from when Hart Howerton receives the survey. Should planting or other construction occur beyond 2016 into 2017, we reserve the right to review the situation to understand if any additional expense may be incurred as a result of the expanded construction timing. This might include additional meetings or other site review.

**FEES**

We will work on an hourly time basis plus reimbursable expenses. Our fee for the services described above will be **\$ 18,960 for The Grays Bay Shoreline and \$33,030 for the Wayzata Bay Shoreline**. Reimbursable expenses are extra and relate to reproduction, travel, delivery and shipping. You should assume a budget allowance of approximately \$500 to cover reimbursable expenses. Bid set reproduction costs are not included and are expected to be within the responsibility of MCWD to produce any and all bid sets. We will bill you on a monthly basis.

Three key Hart Howerton staff members will be working on this project. They are as follows with respective fees indicated:

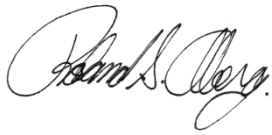
<b>Roland Aberg, Principal In Charge (for Design)</b>	<b>\$200 / hr</b>
<b>Roland Aberg, Principal In Charge (for Construction)</b>	<b>\$185 / hr</b>
<b>John Larson, Project Manager of Construction</b>	<b>\$160 / hr</b>
<b>Jennifer Lau, Production and Management</b>	<b>\$155 / hr</b>

**Other Hart Howerton staff may be utilized and their average billing rate will be \$145 / hr.**

This letter will serve as our contractual agreement combined with an MCWD cover contract agreement. Thank you for the opportunity to work with you on this challenging but important project.

Sincerely,

Accepted



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Roland S. Aberg

Principal

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MCWD

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Date

Hart Howerton

<b>Exhibit B - Scope of Work Budget Worksheet - Highway 101 Causeway Shoreline Reconstruction Project</b>			
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ID	Task	Estimated Hours	Budget
a	Data Collection	14	2,670.00
b	Preliminary Design Report	91	16,815.00
c	Final Design Report	70	12,690.00
d	Permitting	0	-
e	Design Meetings	33	6,585.00
f	Construction Bid Documents and Bidding	14	2,550.00
g	Construction Observation and Oversight	60	10,680.00

Sub-Total	282	\$51,990.00
Contingency (10%)		\$ 5,199.00
<b>Total</b>		<b>\$ 57,189.00</b>

Consultant	Time Allocation	Hourly Rate
Hart Howerton	100%	\$145/\$200 per hr